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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* KUNIO KAMIMURA<sup>1</sup>

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Appeal 2015-007472  
Application 12/995,158  
Technology Center 2100

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Before JOHNNY A. KUMAR, JOHN A. EVANS, and SCOTT E. BAIN,  
*Administrative Patent Judges.*

Opinion for the Board filed by *Administrative Patent Judge*  
JOHN A. EVANS.

Opinion Dissenting-in-part filed by *Administrative Patent Judge*  
JOHNNY A. KUMAR.

EVANS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant<sup>2</sup> seeks our review under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1 and 12–22. Claims 2–11 are cancelled. App. Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> *Pro se.* App. Br. 1.

<sup>2</sup> According to the Appeal Brief, “Kunio Kamimura is the inventor, applicant and appellant of the application . . . . The patent may be assigned to Athena Telecom Lab, Inc., which has been owned by Kunio Kamimura.” App. Br. 1.

We REVERSE.<sup>3</sup>

## STATEMENT OF THE CASE

### *The Invention*

The claims relate to a method for editing databases. *See* Abstract. Claims 1 and 17 are independent.<sup>4</sup> An understanding of the invention can be derived from a reading of exemplary claims 1 and 17, which are reproduced below with some formatting added:

1. A method of updating a database, comprising a sequence of procedures:
  - a first procedure including
  - a step of receiving a first editing work to said database,
  - and
  - a step of fetching a first ordinal number that was a version number of said database at the time of making said first editing work and has been assigned to said first editing work,
  - a second procedure including a step of comparing said first ordinal number and a second ordinal number that was a version number of said database at the time of making said second editing work,

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<sup>3</sup> Rather than reiterate the arguments of Appellants and the Examiner, we refer to the Appeal Brief (filed January 20, 2015, “App. Br.”), the Reply Brief (filed August 9, 2015, “Reply Br.”), the Examiner’s Answer (mailed July 2, 2015, “Ans.”), the Final Action (mailed November 20, 2014, “Final Act.”), and the Specification (filed November 29, 2010, “Spec.”) for their respective details.

<sup>4</sup> Claims 12–16 recite, *inter alia*: “A method of updating a database, according to claim 1.” Claims 18–22 recite, *inter alia*: “An apparatus of updating a database, according to claim 17.” The claims are informal. Should prosecution continue, the claims should be amended to recite “[t]he method . . .” or “[t]he apparatus . . .,” as appropriate.

a third procedure including a step of updating said database by said first editing work, if said first ordinal number is newer than said second ordinal number.

17. An apparatus of updating a database, comprising the following blocks:

a first block, at least receives a first editing work to said database, and fetches a first ordinal number that was a version number of said database at the time of making said first editing work and has been assigned to said first editing work,

a second block, at least compares said first ordinal number and a second ordinal number that was a version number of said database at the time of making said second editing work,

a third block, at least updates said database by said first editing work, if said first ordinal number is newer than said second ordinal number.

### *Related Appeals*

The present Panel AFFIRMED the rejection of all claims appealed in related Application 13/714,422 (Appeal 2014-004754).

### *References and Rejections*

1. Claims 17–22 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Final Act. 2–3.
2. Claims 1 and 11–22 stand rejected under 35 U.S.C. § 102(e) as anticipated by Sivapragasam et al. (US 2007/0282914 A1; Dec. 6, 2007). Final Act. 3–6.

### ANALYSIS

We have reviewed the rejections of claims 1 and 12–22 in light of Appellant’s arguments that the Examiner erred. We consider Appellant’s arguments *seriatim*, as they are presented in the Appeal Brief, pages 3–6.

CLAIMS 17–22: NON-STATUTORY SUBJECT MATTER

The Examiner finds the claims relate to “software per se” and are, therefore, non-statutory. *See* Final Act. 2–3. Appellant contends that Specification Figures 2 and 5 positively identify hardware structure of an apparatus. App. Br. 3.

We agree with the Examiner that the claims do not incorporate, as limitations, the hardware described in the Specification. *See* Ans. 3–4. However, we find the Examiner’s “software per se” analysis is precluded by the subsequent Federal Circuit Decision, *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016).

“We must first determine whether the claims at issue are directed to a patent-ineligible concept.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). Claims “purport[ing] to improve the functioning of the computer itself,” or “improve[ing] an existing technological process” might not succumb to the abstract idea exception. *Enfish*, 822 F.3d at 1335 (quoting *Alice*, 134 S. Ct. at 2358–59). “Software can make non-abstract improvements to computer technology just as hardware improvements can.” *Enfish*, 822 F.3d at 1335. Therefore, it is impermissible to find claims to software to be non-statutory “per se.”

We find the present claims are directed to improved methods for multiple computers to effect parallel edits to a common database. *See* Claim 17. As was the case in *Enfish*, “the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.” *Enfish*, 822 F.3d at 1336.

CLAIMS 1 AND 11–22: ANTICIPATION BY SIVAPRAGASAM

Appellants contend that “[e]xcept for using the phrase of ‘version number,’ there is no similarity between the first procedure and paragraph [0025] of Sivapragasam.” App. Br. 4. Appellants argue Sivapragasam compares “update/delete times” such that the “last writer wins.” *Id.* Appellants argue that, in contrast to Sivapragasam, the claimed invention compares the version numbers of the database as they existed at the time of editing. *Id.* at 5.

The Examiner finds the “change unit” disclosed by Sivapragasam reads on the claimed “a step of receiving a first editing work to said database.” Ans. 5. The Examiner finds the claimed “step of fetching a first ordinal number that was a version number of said database” is disclosed by “Each time a change is made to a change unit, the change is assigned a new change unit version number.” *Id.*

Appellant contends that Sivapragasam discloses that a “change unit” is a paragraph of a document, or a sentence of a paragraph.” Reply Br. 7 (citing Sivapragasam, ¶ 25). Appellant argues numbers relating sections of a document are distinct from numbers relating to the document, itself. *Id.* We agree.

Appellant discloses that “[d]uplicated DBs [databases] (hereinafter “local original DB”) of the original DB (hereinafter “global original DB”) are placed in plural PCs. This local original DB has [an] initial version, which is an ordinal number indicating order of updating. Spec. ¶ 19. Sivapragasam discloses a “change unit is the smallest portion of an entity that is tracked during synchronization.” Sivapragasam ¶ 25. Sivapragasam discloses that a “document, such as a MICROSOFT WORD® document,

could comprise entities in the form of paragraphs. That is, an entity could be defined as a paragraph. A change unit could be defined as a sentence. *Id.* We agree with Appellant that a sentence, as disclosed by Sivapragasam, is not equivalent to a database of the invention.

DECISION

The rejection of claims 17–22 under 35 U.S.C. § 101 is REVERSED.

The rejection of claims 1 and 11–22 under 35 U.S.C. § 102 is REVERSED.

REVERSED

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* KUNIO KAMIMURA<sup>5</sup>

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Appeal 2015-007472  
Application 12/995,158  
Technology Center 2100

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Before JOHNNY A. KUMAR, JOHN A. EVANS, and SCOTT E. BAIN,  
*Administrative Patent Judges*.

KUMAR, *Administrative Patent Judge*, dissenting-in-part.

I agree with the majority in reversal of claims 1 and 11–22 under 35 U.S.C. § 102. I write separately to voice my disagreement with the majority’s reversal of claims 17–22 under 35 U.S.C. § 101. In particular, the majority concludes that present claims are directed to improved methods for multiple computers to effect parallel edits to a common database, as was the case in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016).

In my view, the § 101 issue on appeal is limited to whether claims 17–22 recite “software per se” and *not* whether these claims are patent-eligible under *Alice* and its progeny. In particular, the Examiner finds claims 17–22 fail to recite any one of the four statutory classes under 35 USC § 101 (i.e.,

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<sup>5</sup> *Pro se*. App. Br. 1.



processes, machines, manufactures, or compositions of matter). Final Act. 2–3. According to the Examiner, “just mention of ‘apparatus’ without any positively identifying **hardware device** with functional description material does not fall within any of the categories of patentable subject matter” under 35 USC § 101 (i.e., processes, machines, manufactures, or compositions of matter). Final Act. 2–3. On appeal, Appellant contends “[c]laim 17 (apparatus claim) of the present invention is classified to the machine category shown by MPEP [§] 2106.” App. Br. 3. In support of that contention, Appellant refers to “Figures 2 and 5 of the present invention [which] positively identify the hardware structure of the apparatus expressed by connections of blocks.” *Id.*

I agree with Appellant that claims 17–22 do not recite “software per se” and, instead, recite an *apparatus* (i.e., machine) within one of the four statutory classes under 35 U.S.C. § 101 and that apparatus comprises several blocks, shown in Figures 2 and 5, each performing the recited functions, shown in Figures 3 and 4 of Appellant’s Specification. On that basis alone, I would reverse the § 101 rejection of claims 17–22.

I am also mindful that claims 17–22 also need to be analyzed in view of the Supreme Court’s decision in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) and its progeny.<sup>6</sup> However, that analysis would raise a new issue or a new ground of rejection because the Examiner has not

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<sup>6</sup> See the Federal Circuit’s precedential decision in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014); *Enfish v. Microsoft*, 822 F.3d 1327 (Fed. Cir. 2016); *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016); and *McRO Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016).

relied on *Alice* and its progeny to support the § 101 rejection. To the extent that *Alice* and its progeny are applicable, I disagree with the majority that claims 17–22 pass muster under *Alice* and its progeny.

The Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354 (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)). The “abstract ideas” category embodies the longstanding rule that an idea, by itself, is not patentable. *Id.* at 2355 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court sets forth an analytical “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Id.* (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297). In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294).

Turning to the first step of the *Alice* inquiry, I find claims 17–22 simply recite an abstract concept of updating data and information. For example, claim 17 recites several functions, including: (i) “fetch[ing] a first ordinal number that was a version number of said database”, (ii) “compar[ing] said first ordinal number and a second ordinal number that was a version number of said database” and (iii) “update[ing] said database . . . if said first ordinal number is newer than said second ordinal number.” All these functions are abstract processes of collecting, comparing, and analyzing information of a specific content. Information as such is intangible. *See Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007). Information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1349 (Fed. Cir. 2015); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011).

Turning to the second step of the *Alice* inquiry, I find nothing in claims 17–22 that adds anything “significantly more” to transform the abstract concept of collecting, storing, and analyzing information into a patent-eligible application. *Alice*, 134 S. Ct. at 2357. Instead, claims 17–22 simply incorporate a general-purpose computer to perform the abstract concept of fetching, comparing, and updating information.

However, limiting such an abstract concept of updating data to a generic purpose computer or apparatus recited in Appellants’ claim 17 does not make the abstract concept patent-eligible under 35 U.S.C. § 101. Ans. 3. As recognized by the Supreme Court, “the mere recitation of a generic

computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *See Alice*, 134 S. Ct. at 2358–59 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer” not patent eligible); *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014) (claims merely reciting abstract idea of using advertising as currency as applied to particular technological environment of the Internet not patent eligible); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible); and *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“Simply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible” (internal citation omitted)).

The majority’s decision to reverse the Examiner’s § 101 rejection is based on the Federal Circuit’s decision in *Enfish v. Microsoft*. In *Enfish*, the Federal Circuit held that claims directed to specific improvements in computer capabilities (i.e., self-referential table for a computer database) are patent-eligible subject matter. For example, *Enfish*’s claim 17 recites:

A data storage and retrieval system for a computer memory, comprising:  
    means for configuring said memory according to a logical table, said logical table including:  
        a plurality of logical rows, each said logical row including an object identification number (OID) to identify each

said logical row, each said logical row corresponding to a record of information;  
a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells, each said logical column including an OID to identify each said logical column; and  
means for indexing data stored in said table.

As explained by the Federal Circuit, *Enfish*'s "claims are not simply directed to *any* form of storing tabular data, but instead are specifically directed to a *self-referential* table for a computer database" that "functions differently than conventional data structures" and that is "designed to improve the way a computer stores and retrieves data in memory." *Enfish*, 822 F.3d at 1337–39.

As recognized by the majority, claims "purport[ing] to improve the functioning of the computer itself," or "improv[ing] an existing technological process" might not succumb to the abstract idea exception. *Id.* at 1335 (quoting *Alice*, 134 S. Ct. at 2358–59).

In contrast to *Enfish*, claims 17–22 on appeal are not rooted in computer technology or seek to improve any type of computer capabilities, such as *Enfish*'s "self-referential table for a computer database." Instead, Appellants' claims 17–22 simply recite an abstract concept of fetching, comparing, and updating information.

Because Appellants' claims 17–22 are directed to a patent-ineligible abstract concept, I would affirm the Examiner's rejection of claims 17–22 under 35 U.S.C. § 101 in light of *Alice* and its progeny.